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ABSTRACT

This group of papers was presented as part of a symposium entitled "Classroom Observation of Students and Teachers (COST): A Multiple Payoff Approach to Inservice Training." The first paper, "Films for Inservice Teacher Training: A Miniworkshop," outlines the rationale and development of the film series of which the film, Consequences of Behavior, is a part. The second paper, "Modifying Student Behavior: What Works, and With Whom" presents some of the evaluation research done to date. The third paper, "The Teacher Approval-Disapproval Scale (TADS): From the Mouths of Babes," describes a behaviorally-focused elementary school attitude questionnaire. The fourth paper, "Hyperkinesis in the Classroom: If Cerebral Stimulants are the Last Resort, What Would Be A First Resort?", describes one part of a project designed to compare the progress of hyperkinetic children treated by means of cerebral stimulants with those managed through behavioral counseling of parents and teachers. (Author/HMV)

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TITL_ Classroom Observation of Students and Teachers (COST): A Multiple Payoff Approach to Inservice Training. A Symposium.

AMERICAN PSYCHOLOGICAL ASSOCIATION CONVENTION

August 30, 1974

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Presentation by Wynn Knowling, Ed.S.

Iowa City Community Schools

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"FILMS FOR INSERVICE TEACHER TRAINING: A MINIWORKSHOP"

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Educators have identified teacher inservice training as one of their role expectancies for school psychologists. The question that naturally arises is: "On what meaningful topics are school psychologists and other special personnel really qualified to provide inservice training for educators?" It was a question such as this that faced the pupil personnel staff in Iowa City about three years ago when they received a federal grant with which to develop teacher inservice materials. After a thorough survey, it was decided that there was very little visual material available for use in training teachers to apply behavioral principles in the regular school setting as they were interacting with the so-called "normal" child. Madsen and Madsen of Florida State University have done extensive teacher inservice training in this area and have used limited visual materials in the form of videotapes. In the Spring of 1971, with the consultation of Madsen and Madsen, the Iowa City Community Schools began the production of a set of 16mm. color films to be used in conjunction with a book written by the Madsens and published by Allyn and Bacon, entitled Teaching/Discipline: A Positive Approach to Educational Planning.

While the Madsens are known as behavior modifiers, their approach differs somewhat from other behavior modification proponents. One of their strong thrusts is an emphasis on the dichotomy between values and techniques. During workshops con-

ducted by the Madsens, the participants spend time analyzing the social and academic values that they individually want to teach. After the educator had stated in behavioral terms the value to be taught, he or she is shown how to apply the behavioral technique. This is presented visually in the form of the Values-Techniques Dichotomy Chart (Figure 1). The values, positive or negative, are identified; then the behavioral techniques of pinpointing, recording, consequating, and evaluating are contrasted with non-behavioral techniques, which are non-observable, non-measurable, non-determined, non-explainable. As the Madsens themselves put it, "When one follows non-behavioral techniques, he tends to hope a lot."

The heart of the Madsen observation system is built on the two-by-two contingency table (Figure 2). They express the belief that the teacher has two means of influencing student behavior--approval or disapproval to the student's social or academic behavior. They use symbols to represent each of these catagories--approval to appropriate social behavior, approval to appropriate academic behavior, disapproval to inappropriate social behavior, and disapproval to inappropriate academic behavior. A contingent relationship is established, so that if the student behaves appropriately he will receive an approval in some form and if he behaves inappropriately he will receive a disapproval in some form. In addition, the Madsens have identified mistakes of reinforcement in each one of these categories and indicate them by the same symbols circled.

When asked, over 99% of 5,686 educators indicated to the Madsens their strong conviction that teachers should encourage

FIGURE 1

Learning Activity #1

VALUES/TECHNIQUES DICHOTOMY CHART

POSITIVE VALUES

a _____	b _____
c _____	d _____

Behavioral Techniques	Non-Behavioral Techniques
1. Pinpoint: Observable	1. Non-Observable
2. Record: Measurable	2. Non-Measurable (Inferential)

TECHNIQUES

3. Consequate: Cause and Effect Relationships	3. Non-Determined (random-chance-chaotic)
4. Evaluate: Isolate causes through specific addition and removal of consequences	4. Non-Explainable Complex causes Unknown Consequences

a _____	b _____
c _____	d _____

NEGATIVE VALUES

(cf. pp. 17-18
What is Behavior Modification)

FIGURE 2

BEHAVIORAL CONTINGENCY INTERACTIONS

STUDENTS BEHAVIOR	SOCIETAL AGENTS BEHAVIOR: APPROVAL	SOCIETAL AGENTS BEHAVIOR: DISAPPROVAL
APPROPRIATE ("ON-TASK"- SOCIAL & ACADEMIC)	YES (NO - WHEN NO DISAPPROVAL) (1)	NO (MISTAKE) (2)
INAPPROPRIATE ("OFF-TASK"- SOCIAL & ACADEMIC)	NO (MISTAKE) (3)	YES (NO - IF PAYOFF OR WHEN NO APPROVAL) (4)

RECOMMENDED USE OF APPROVAL / DISAPPROVAL

RULES —
- 4 APPROVALS
- 1 DISAPPROVAL
- 0 MISTAKES

RULES — APPROVAL — IGNORE — DISAPPROVAL

RAID

a positive classroom environment. Ninty-seven percent (97%) of them agreed that a strong indicator of a positive classroom environment would be that more approving than disapproving statements were made by the teacher. In actual practice, however, when trained observers went into classrooms, it was reported that 95% of 2,574 teachers dispensed more disapproval than approval for academic behavior. To facilitate the collection of such data on teacher interaction, the Madsens developed several relatively easy-to-use observation forms. If only the on-task/off-task behavior of an individual student is to be observed, Student Observation Form C is used (Figure 3). This form is set up for the observe-recording intervals, and in each record interval there are symbols to be marked--such as the plus sign (+) for student on-task behavior, "N" for noise off-task, "M" for motor off-task, and "O" for passive off-task. If the teacher's comment and its effect on the on-task/off-task behavior of the entire class are to be observed, then the Group On-task, Off-task Teacher Response Form H (Figure 4) is the one that's used. The symbols represent the eight categories of teacher-responses: As for approval-social, approval of appropriate social behavior; Aa for approval of appropriate academic behavior; Ds for disapproval of inappropriate social behavior; and Da for disapproval of inappropriate academic behavior, and the same symbols circled to stand for mistakes of reinforcement. In addition, in each interval there is space for recording the total number of students off-task during the preceeding observation interval.

The fact that the Madsens advocate giving some disapproval, roughly a 4-to-1 ratio of approval to disapproval, makes this approach more attractive to teachers.

To provide a knowledge base for teacher-observational skills, the Iowa City School District has produced a set of six (6) films which will be available early in the 1975 calendar year (Figure 5). The first film, entitled "Desire Versus Behavior", is approximately 30 minutes in length. In this film Dr.'s Charles and Clifford Madsen discuss the disparity between one's belief (believing one should be positive in a classroom) versus one's behavior (what one actually does as far as the dispensing of approvals and disapprovals). The second film, "Values Versus Techniques," is approximately 40 minutes in length. In this film a classroom scene is used to illustrate behavioral techniques once a value has been determined by the educator. The third film, "Consequences of Behavior," is approximately 60 minutes in length. In it are shown examples of approvals and disapprovals used by educators and an explanation of the two-by-two contingency table which I went over briefly with you showing how to set up a contingent relationship between behavior and its consequences. The fourth film, "Approval? Disapproval?," is approximately 30 minutes in length and shows one teacher illustrating the use of approval and disapproval in his interactions on both the primary and secondary levels. The fifth film is divided into three parts. It is actually three separate films which can be used separately. The first part, "Recording Student Behavior," is about 25 minutes

FIGURE 5

I.	Desire vs. Behavior	30 Minutes
II.	Values vs. Techniques	40 Minutes
III.	Consequences of Behavior	60 Minutes
IV.	Approval ? Disapproval ?	30 Minutes
V.	Recording Classroom Behavior	
	Part 1. Recording Student Behavior	25 Minutes
	Part 2. Recording Teacher Behavior	30 Minutes
	Part 3. Recording Student/Teacher Interaction	40 Minutes
VI	Choice of Reinforcers	40 Minutes

in length and is a very programmed film teaching the use of the observation form to record on-task behavior of an individual student. In this film the observer looks at one student at a time, records his behavior, and then is given feedback as to what behavior should have been recorded. The second film under this section is "Recording Teacher Behavior" and is about 30 minutes in length. This film teaches the use of the form to record the teacher's social and academic approvals and disapprovals. The observer observes only the teacher's behavior and follows the same format: observe, record, and receive feedback on what should have been recorded. This is another very programmed film teaching the observational skill of recording only the teacher behavior. The third film, entitled "Recording Student/Teacher Interaction," is about 40 minutes in length and teaches the use of the observation form to record both student and teacher interaction simultaneously. In this film, again very programmed, the observer looks at the teacher and counts the number of students that are off-task, records them, and receives feedback as to what should have recorded. The sixth film, entitled "Choice of Reinforcers," is approximately 40 minutes in length. In this film the Drs. Madsen discuss various types of potential reinforcers, and at the end of the film an actual token economy system is shown in practice. The teacher describes how he set up a token system and how it operates.

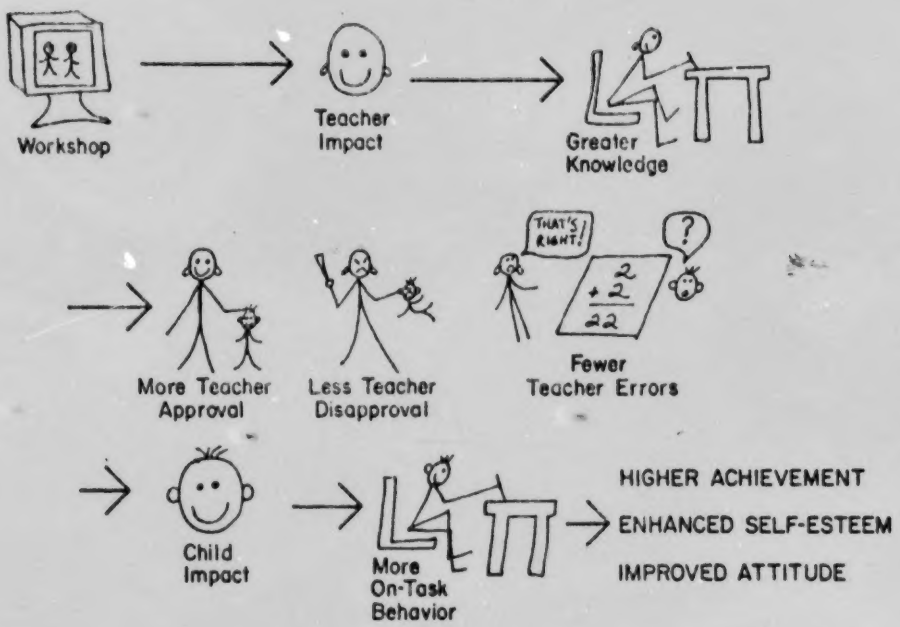
Today, we are going to give you a brief look at the third in this series of films, where the principles of setting up a

contingent relationship between behavior and consequences is taught. You'll see examples of approvals, disapprovals, and mistakes of reinforcement. This, by the way, is the first public showing of this film. (Film).

To evaluate the effectiveness of this technique for in-service training, we used the film content in videotape format for a couple of years to train educators. The procedures which we used and some of the data that we collected will be discussed in detail in Section One. Briefly stated, (Figure 6) we provided the workshop with the idea that we could increase the knowledge base of the teacher, increase his or her number of approvals for appropriate student behavior and decrease number of disapprovals for inappropriate behavior. In turn, we investigated the effect that changing the teacher's behavior had upon the students in the form of a decrease in the student's off-task behavior and increase in the students' self-esteem and academic achievement. The overall goal was to produce a happier learning environment. We have data to show what happened as far as each of these categories is concerned.

I realize that this has been a very rapid presentation. If you're interested in the details of the inservice program, I'd welcome the opportunity to talk with you following the section meetings.

FIGURE 6


Workshop
Teacher Impact
Greater Knowledge
More Teacher Approval
Less Teacher Disapproval
THAT'S RIGHT!
?
2
+2
22
Fewer Teacher Errors
Child Impact
More On-Task Behavior
HIGHER ACHIEVEMENT
ENHANCED SELF-ESTEEM
IMPROVED ATTITUDE

"MODIFYING STUDENT BEHAVIOR: WHAT WORKS AND WITH WHOM?"

Robert Prinz, Ed.S., and Jan Loney, Ph.D.

University of Iowa

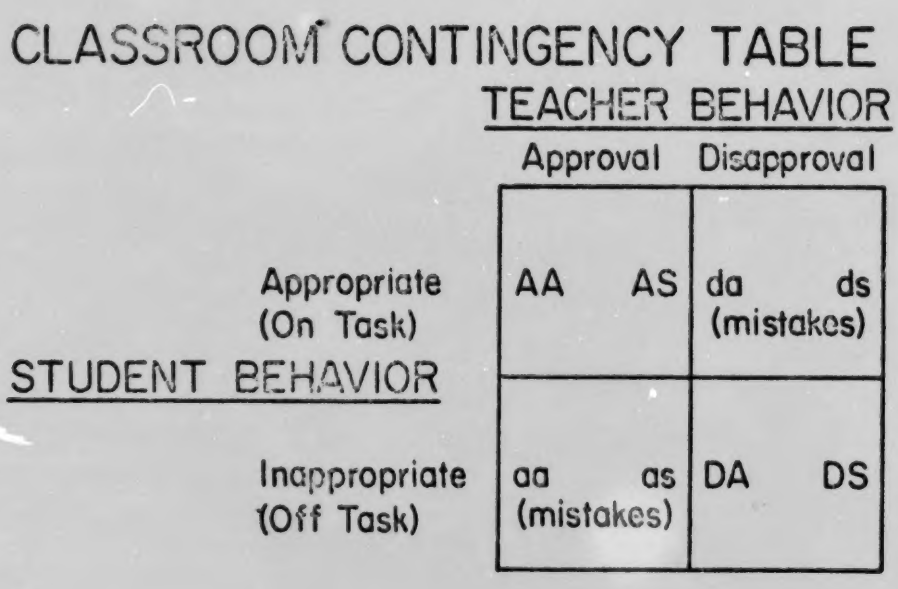
Paper presented at the American Psychological Association
1974 Convention

An efficient way to elicit and maintain improved student behavior is through teacher training. If a teacher can regularly apply a few basic principles, a positive classroom climate can be established, maximizing the chances for academic gain and social growth and minimizing the chances for behavior problems. It is assumed that behavior is learned and can therefore be modified by the classroom teacher applying appropriate behavioral consequences. In short, we feel that modifying student behavior is easiest when teachers are able to create a particular classroom environment and to apply the techniques to be described. Therefore, the intial job for the consultant hoping to change student behavior is to modify teacher behavior.

The general model we work from is designed to deal with teacher and student behavior in a more or less standard classroom situation. It borrows fairly heavily from the work of Madsen and Madsen. The model is represented by the standard contingency table pictured in Figure 1, showing student behavior, both academic and social, and teacher responses to the student being either on or off-task.

"On-task" and "Off-task" must necessarily be defined within an appropriate context. On-task or off-task social behavior is dependent upon the teacher's standards and rules for the classroom, so he or she has much more control here

FIGURE 1


CLASSROOM CONTINGENCY TABLE
TEACHER BEHAVIOR
Approval
Disapproval
STUDENT BEHAVIOR
Appropriate (On Task)
Inappropriate (Off Task)
AA AS
da ds (mistakes)
aa as (mistakes)
DA DS

than over academic on-task and off-task behavior. For example, calling out an answer might be considered off-task in one classroom but not in another, depending on the teacher's standards.

So, what occurs is that a child's behavior is on-task or off-task, and is followed by the teacher's behavior, or response, of approval or disapproval. Approvals may be subtle--such as a glance or a slight smile; or they may be quite overt and direct--a hug, or a loud exclamation of delight. Approvals can be intangible--such as a positive remark; or tangible--as is the case with tokens, M & M's, and so forth. An approval can be the opportunity to do an activity that the child likes; the possibilities are vast. Likewise, disapprovals may include glances, snide remarks, physical punishment, and so forth.

According to the model, whether or not the student is off-task or on-task is influenced over time by the teacher's response to the child's behavior. Behavior that is approved will be repeated or increased, and behavior that is disapproved will be decreased.

Within each section of the table, teacher responses to both academic and social child behavior are shown. For example, in the "teacher approval for on-task behavior" segment, we see AA for academic approval and AS for social approval and, similarly, DA and DS in the segment dealing with "teacher disapproval for off-task behavior.

Definitions of academic and social behavior are fairly straight-forward. For most on-task behaviors in the academic realm the child gives a correct answer (2 + 2 = 4), while for off-task academic behavior a wrong answer is given. Social behavior is essentially everything else; that is, the way the child works, the way he approaches a task, or the way he acts in general. Essentially we're talking about the work as such with the academic category versus the way things are done with the social category.

The capital letters in the contingency table indicate that the action by the teacher is correct: providing approval for on-task social or academic behavior and disapproval for off-task social or academic behavior. It's the equivalent of saying, as Madsen and Madsen do, "If you do good things, good things will happen to you; and if you do bad things, bad things will happen to you."

The lower-case letters in the off-diagonal boxes represent reinforcement mistakes: giving approval for off-task behavior or disapproval for on-task behavior. Of course, our focus in teacher training is to maximize appropriate actions by the teachers and to minimize errors in reinforcement.

Previous research, including our own, has demonstrated that most teacher behavior towards students can be classified as either academic approval (that is, positive reinforcement for correct school work) or as social disapproval (punishment for rule-violating behavior). Thus, the untrained teacher tends to tell the child either that his answer is right or

that his behavior is bad.

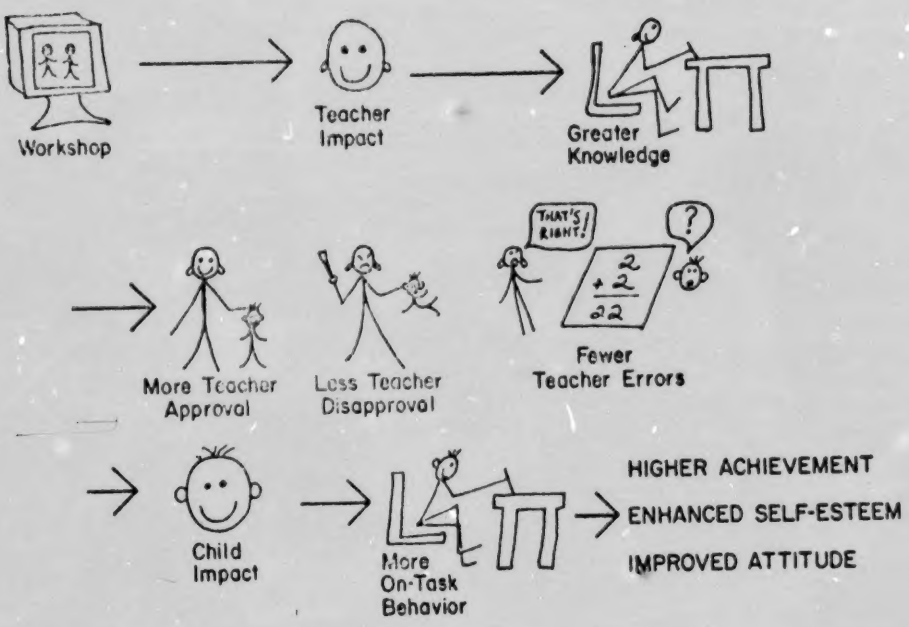
We have all seen children who work for attention, regardless of the type. What happens so often, then, is that the typical teacher's behavior suggests to the child that attention is received either for being smart or for being bad. The not-too-far-fetched corollary is: not everyone can be smart, but everyone can be bad. Therefore, in some sense, teachers typically promote off-task behavior.

That is essentially the framework. A couple of common rules from classroom behavior management lore are implied. One rule is: "Catch the child being good" or "Accentuate the positive." In other words, start giving more approval when the child is on-task. Another rule is: "Ignore bad or off-task behavior, when you can." A more or less arbitrary goal of four approvals to one disapproval is suggested by Madsen and Madsen.

A picture of the approach we're using is shown in Figure 2. Obviously, the workshop must first have an impact on the teachers. If one is successful, the teachers acquire, at a minimum, more knowledge, often measured with a pre-test/post-test criterion. It seems fairly clear from our work and the work of others that significant gains in knowledge occur almost invariably. But that's not the payoff. We want to produce more than mere ability to respond correctly on a knowledge test.

A major goal of our workshop is to see in the classroom more teacher approval, less teacher disapproval, and fewer

FIGURE 2


Workshop
Teacher Impact
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More Teacher Approval
Less Teacher Disapproval
THAT'S RIGHT!
Fewer Teacher Errors
Child Impact
More On-Task Behavior
HIGHER ACHIEVEMENT
ENHANCED SELF-ESTEEM
IMPROVED ATTITUDE

errors of reinforcement. Appropriate teacher behavior is supposed to have an impact on the child, taking the form of more on-task behavior and ultimately resulting, according to the theory, in higher achievement and, hence, enhanced self-esteem and improved school attitude. We have attempted to evaluate the various steps in this model of the sequence of workshop delivery, using the available standard measures at some points and at some points developing measures of our own. But, for the present, let us focus on the step between workshop completion and changed teacher behavior. More specifically, we want to discuss developing efficient use by teachers of approval and disapproval.

In the course of presenting various inservice workshops and then going into the classrooms to check the effects, it appeared to us that the in-class consultation process was a power in changing teacher behavior and not just knowledge gained from the workshop. So we decided to look at the effect on teacher behavior of giving our workshop both with and without repeated feedback to teachers from a visiting consultant and to compare those two groups with a control group whose teachers had no workshop.

To test our ability to produce teacher-change, we selected an elementary school in a Midwestern college town of about 3,000 population. None of us was employed by the school in this town, nor had we been invited to provide inservice training. It was a school in which we had done and continue to do various kinds of research. The initial attitude of the

teachers was one of not-terribly-enthused acquiescence. At first, many of them thought we were doing an unannounced accountability study, and they reacted to that about the way you might imagine. In light of the situation, the results we got could likely be replicated in many places--particularly if explicit kinds of reinforcement, such as course credit, were available to the teachers. And obviously it would be easier if the teachers had formed a desire for the inservice project rather than having it foisted upon them.

As it happens, there are five grades in this school, with three teachers at each grade. One teacher per grade was assigned to each of the three conditions, with the groups matched on teacher age and years of experience. Teachers in the first condition received the workshop with repeated feedback from the consultant. Teachers in the second condition received the workshop alone without feedback, and teachers in the third condition (control group) received no workshop at all. Weekly half-hour classroom observations by trained observers were made of all teachers in all three conditions. The overall reliability between observers was in the mid .70's for teacher behavior and the .90's for child behavior.

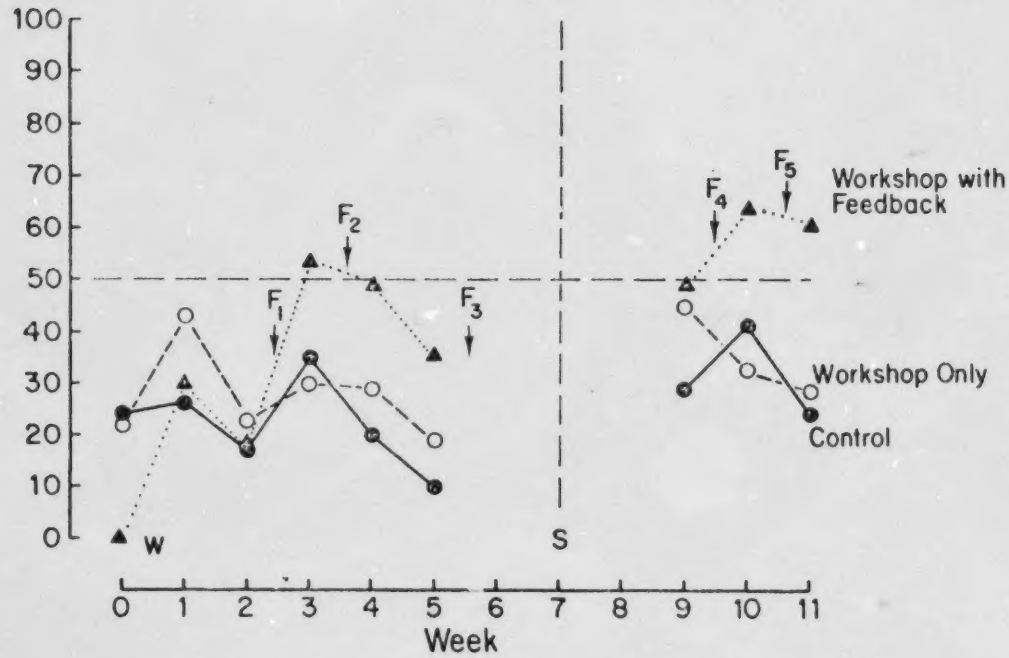
The workshop was of the type often used in behavioral inservice training. There were four hours of video tapes in which the Madsen & Madsen material was presented, learning exercises of various types, and discussions. The workshop was very well-received by participants. Feedback consisted of the teacher consultant going into each classroom and

talking with the teacher about the observations made in his/her classroom the previous week. Graphs of the teacher's approval/disapproval ratio were shown, suggestions were offered, and in general whatever seemed appropriate to encourage and reinforce that particular teacher was done.

Probably the most changeworthy thing that the typical untrained teacher does is dispense a great deal of social disapproval. Figure 3 presents the percentage of social approval given by the three groups. There are five teachers for each point, one from each grade level. The weeks of the study run along the bottom. The vertical dashed line at the seventh week is spring vacation; although school was in session for weeks 6 and 8, we didn't observe in the classroom, mainly because of the chaos and confusion expected during these weeks. The first point is the baseline or pre-workshop point, and "W" indicates the point at which the workshop occurred. The five numbered feedback points are the places in the time sequence where the workshop with feedback group received their feedback visits.

We note, first, that all of the groups, but especially the feedback group, start low in social approval. At the baseline point, no social approval is given by the feedback group and only 20% or so is given by the other two groups. As was mentioned, this is typical of most classrooms we've seen. After the workshop is completed the two groups receiving the workshop show a rise in social approval followed by a drop; by the second week it seems pretty difficult to argue that the

FIGURE 3



Percent Social Approval Given by Teachers Under Three Conditions

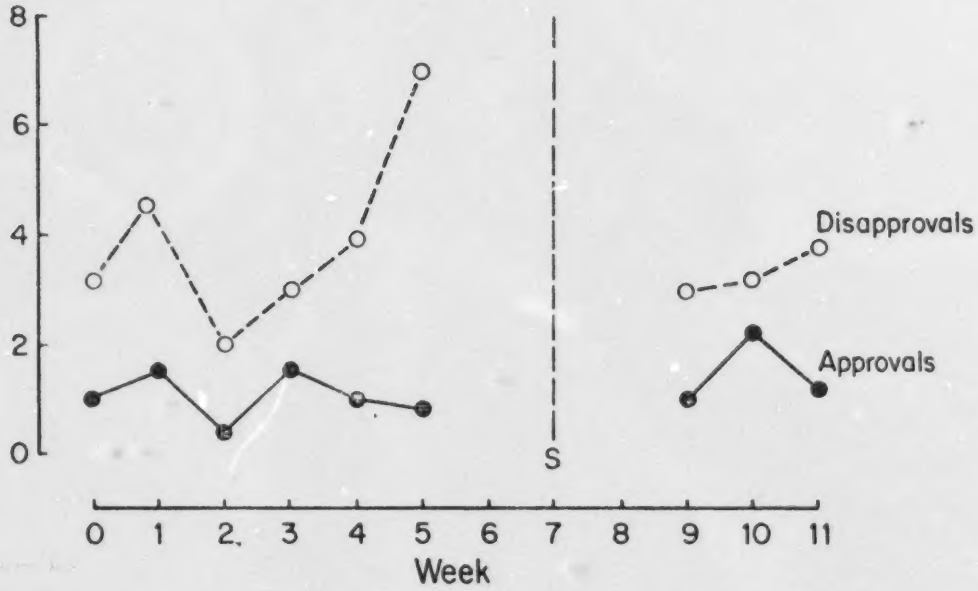
three groups are different. The first feedback visit, F1, occurs between the second and third week, and there is a marked increase of social approval in the feedback group; at no point after that is social approval lower than in the other groups. The feedback group is, in fact, the only group that ever rises to as much as 50% approval, i.e., weeks in which as much or more approval is given than disapproval.

In the vicinity of weeks 3, 4, and 5 we see what we call the "spring doldrums effect," with what looks like a drop in social approval across all three groups as spring break approaches. All groups, however, rise after spring break as school again becomes normalized.

The next graphs (Figures 4,5,6) show the number of social approvals and disapprovals in another way. For instance, it can be seen with the control group (Figure 4) that there is a great amount of disapproval compared to approval, and the workshop only (Figure 5) group is discouragingly similar. Figure 6 shows the feedback group, and it can be seen that approvals become more frequent than disapprovals--a kind of crossover effect. What is observed, importantly, is the reduction in disapprovals. The rise in social approval can possibly be produced with the workshop alone, but the social disapprovals decrease as well.

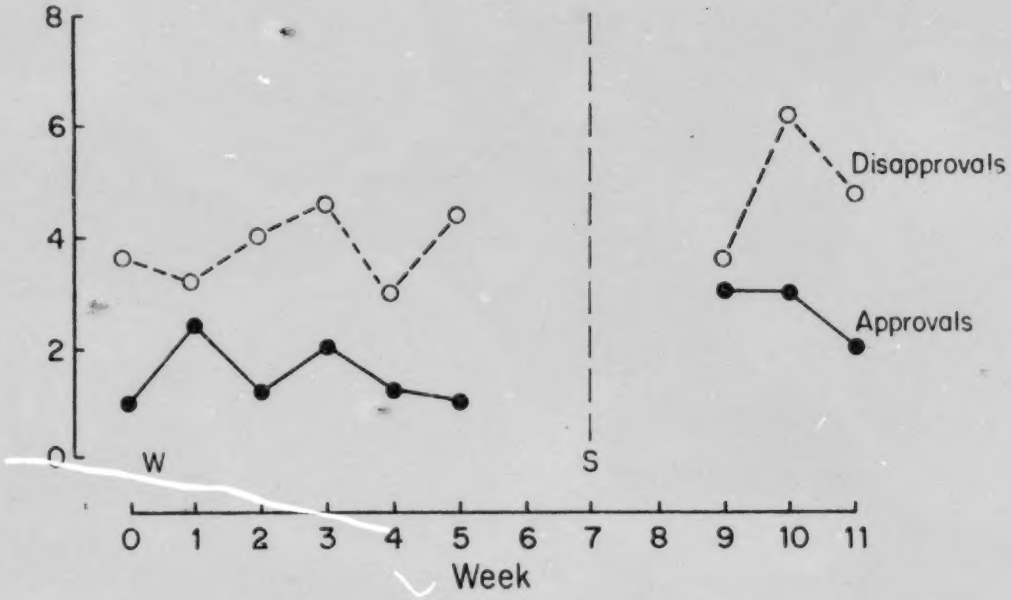
Therefore, it seems a workshop alone is not as effective in producing teacher change as a workshop with provision for regular feedback and additional information.

FIGURE 4



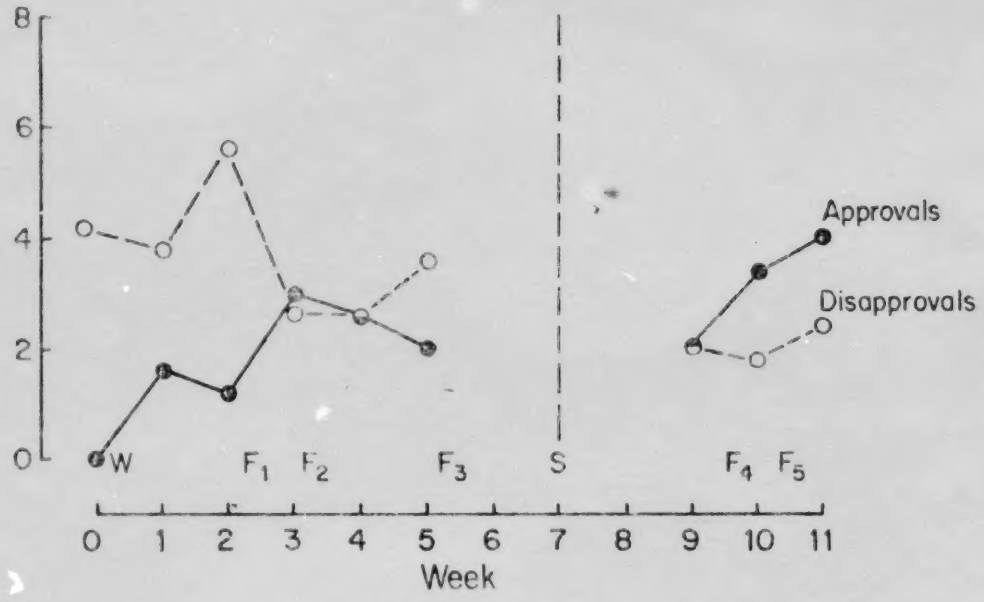
Social Approvals and Disapprovals Dispensed by Teachers in the Control Group

FIGURE 5



Social Approvals and Disapprovals Dispensed by Teachers in The Workshop Only Group

FIGURE 6



Social Approvals and Disapprovals Dispensed by Teachers in The Workshop With Feedback Group

At this point, we don't know exactly what is effective about the feedback. However, it is likely one or a combination of several things. (1) It may be that having somebody consult, reinforce, and give feedback works simply by keeping the teachers doing what the workshop has suggested should be done. Over a course of time the children will respond positively to the teacher change, producing a situation in which the children's new behavior then reinforces the teacher. At that point the changes become self-perpetuating, and the consultant is not necessary. In a way, we feel that in all effective behavior midification projects the kids modify the teachers and the teachers modify the kids. We call this the Benign Circle, as opposed to the Vicious Circle. (2) Another important feature of feedback may be showing the teachers their own data. In other words, showing them graphically how they really are handling things and where they're making mistakes. We find that teachers are quite surprised at how disapproving they are observed to be. (3) It may be that an important aspect of giving feedback is its therapeutic value; i.e. the teachers express the idea that "It's nice to have somebody come around and show an interest." (4) Finally, it may be that the person who is providing the feedback simply makes the point that is often made using the teacher's own data: that disapprovals are important and they are overwhelmingly prevalent. If that is what accounts for the change, the need for using each teacher's personal data is reduced. The point could be made in the workshop itself with the figures

you've just seen, and that might be enough.

In any event, there appears to be something in the feedback condition that works, and we're beginning to feel that seeing the graphs of their own behavior and realizing the effects of disapprovals have a powerful impact on teachers.

Now, a word about some other effects we've observed. As we mentioned previously, our research and the research of others has demonstrated that most teacher behavior toward students is classified as academic approval or as social disapproval. Research of various kinds has also suggested that elementary school teachers are more approving toward female students and more disapproving toward males. It is also widely held that more boys than girls display behavior and learning problems. Since the first rules given to the teachers in this particular kind of model are "Catch the child being good" and "Ignore bad behavior," one might develop, as we did, the hypothesis that the children caught being good would be girls and that the children ignored would be boys.

As we look at the initial responses of teachers to the workshop experience we've been talking about, they do seem to do what we've hypothesized. That is, after training they direct even more approval to girls and to boys without behavior problems. The disapproval that remains after the workshop experience is given selectively to hyperactive or behavior-problem boys. In fact, our studies suggest that such a hyperactive boy may get almost all of the disapprovals that

even the trained teacher dispenses. If these data hold up, they suggest among other things that our work as consultants should include a second stage in which specific attention is given to the kind of child who is left with the disapprovals.

"THE TEACHER APPROVAL-DISAPPROVAL SCALE (TADS): FROM THE MOUTHS OF BABES"

Mary Anne Whaley, M.A., and Jan Loney, Ph.D.

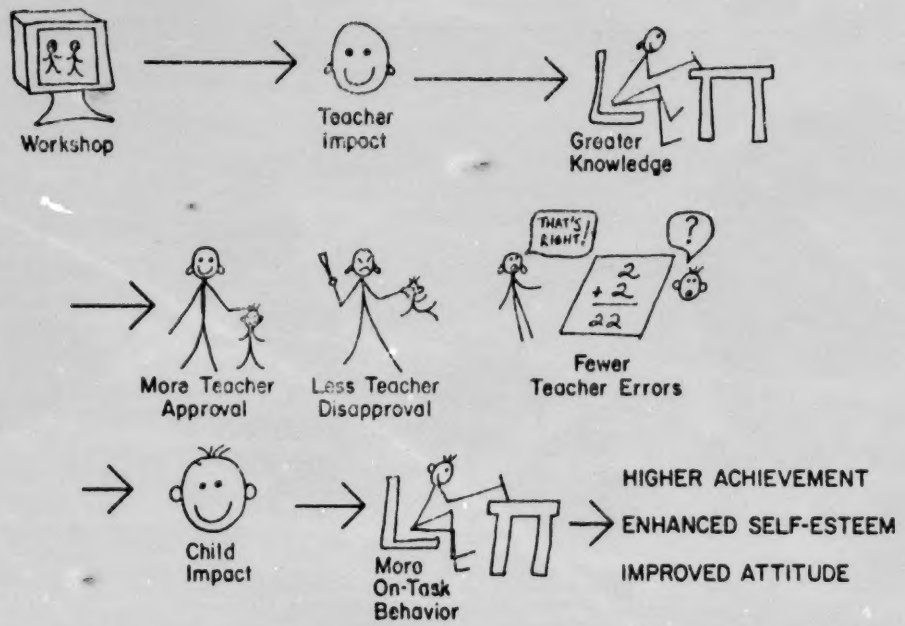
University of Iowa

Paper presented at the American Psychological Association
1974 Convention

Early in the course of our research, before it became evident that we could indeed produce significant increases in on-task behavior of students by changing teacher behavior, we asked ourselves this question: "If we cannot demonstrate any change in the classroom by observing the children, can we at least find out if the kids noticed that the teachers' behavior had changed, even if their own had not?" We wondered if our intervention might affect the children in more subtle ways--perhaps in how they saw themselves as students and how they felt about the classroom experience in general.

The next logical question was: How would we measure this? At that point, we decided simply to ask the children to respond to a series of direct, yet non-threatening questions about the teacher behaviors we were trying to modify and the change in classroom atmosphere we were attempting to produce. Thus, the original goal of the Teacher Approval-Disapproval Scale, or TADS, was to see if we were getting from teacher behavior to child impact (Figure 1). The test was designed to conform with behavioral principles and research findings. Items were written to tap the child's impressions of and responses to the amount of teacher approval and disapproval displayed for academic and social behaviors by the child and by his classmates.

FIGURE 1


Workshop
Teacher Impact
Greater Knowledge
More Teacher Approval
Less Teacher Disapproval
THAT'S RIGHT!
?
2
+2
22
Fewer Teacher Errors
Child Impact
More On-Task Behavior
HIGHER ACHIEVEMENT
ENHANCED SELF-ESTEEM
IMPROVED ATTITUDE

Here (Figure 2) is how the TADS relates to the model described by Prinz and Loney. We have the various item classes, and examples of the type of questions representative of each category. Items in the Teacher Approval-Teacher Disapproval Classification (Number I) concern themselves with whether the teacher likes or doesn't like specified student behaviors. Items in the Student Behavior Classification (Number II) deal with teacher responses to academic behavior (the work that is done) or to social behavior (the way the work is done, or the way the student acts). Items in the Student Response Classification (Number III) center around student happiness or unhappiness in the classroom. Finally, items can be classified (Number IV) in terms of whether they focus on the behavior of the Individual student respondent or of the Class as a whole.

In all, the TADS is a 23-item test presented in the format shown in Figure 3. We chose this format for several reasons. We ask the child to estimate the frequency of teacher behavior, and to assess his own and the class's response. This allows more room for variation than simply asking if a behavior or a response occurs at all. And asking about behavioral frequency would seem to be a more useful and objective way of measuring change than asking about degree of liking or happiness on a "very much" to "not very much" scale. As you see, the items are simply stated, easy to read, and are more teacher-centered than child-oriented. For instance, we ask the child to tell us how much of the time the teacher likes

FIGURE 2

THE TEACHER APPROVAL DISAPPROVAL SCALE (TADS)

CLASS OF ITEM	SYMBOL	EXAMPLE
I. Teacher Approval	A	The teacher likes....
Teacher Disapproval	D	The teacher doesn't like....
II. Academic	A	....the school work I do.
Social (academic)	Sa	....the way I work.
Social	S	....the way I act.
III. Positive Student Response	H	In my classroom I am happy.
Negative Student Response	Un	In my classroom I am unhappy.
IV. Individual Student	I	....the school work I do.
Class as a Group	C	....the school work the class does.

FIGURE 3

THE TEACHER APPROVAL-DISAPPROVAL SCALE (TADS)

© Jan Loney, 1974

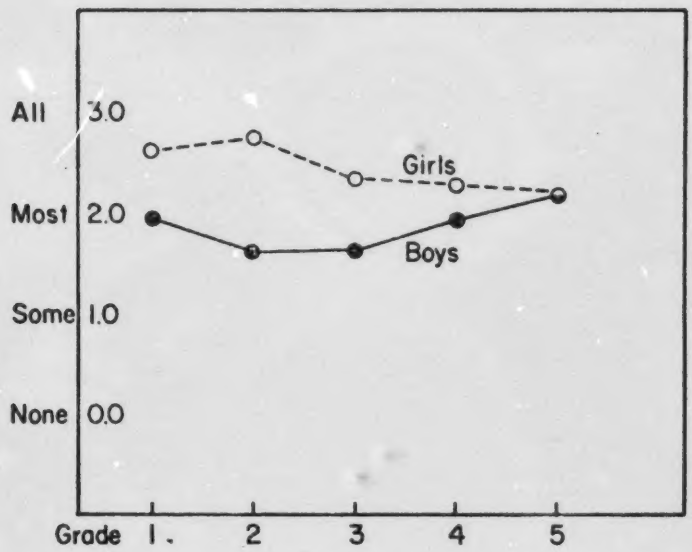
1. The Teacher Likes The School Work The Class Does. . . .	NONE of the time	SOME of the time	MOST of the time	ALL of the time
2. My Teacher Punishes Students.	NONE of the time	SOME of the time	MOST of the time	ALL of the time

or doesn't like the way he or she acts, rather than asking "Does the teacher like you?" or "Do you like yourself?"

When introducing the TADS in a classroom, we explain to the children that we are interested in what really goes on in classrooms, and we assure them that their answers are confidential. To date, we have had no difficulty enlisting children's cooperation, and we believe that for the most part their answers are honest and representative of their observations and feelings. We have been able to get meaningful data from children as young as first graders, and we have found that kindergarteners understand the questions, if not the format.

After designing the TADS, we addressed ourselves to the questions of reliability and validity. Previous research on school attitude indicates that girls have more positive attitudes toward grade school than boys and that younger children have more positive attitudes than older children. Figure 4 shows the distribution of response to the TADS question "I enjoy being in this class" across five grades for boys and girls. As you see, girls say they enjoy the classroom experience more than boys do, and this difference in enjoyment declines with age. In this particular example, the girls' level of enjoyment drops significantly over the five grades. These data were obtained at an Iowa grade school prior to any classroom intervention, and they would seem to be one fairly good indication that the item does tap school attitude.

FIGURE 4

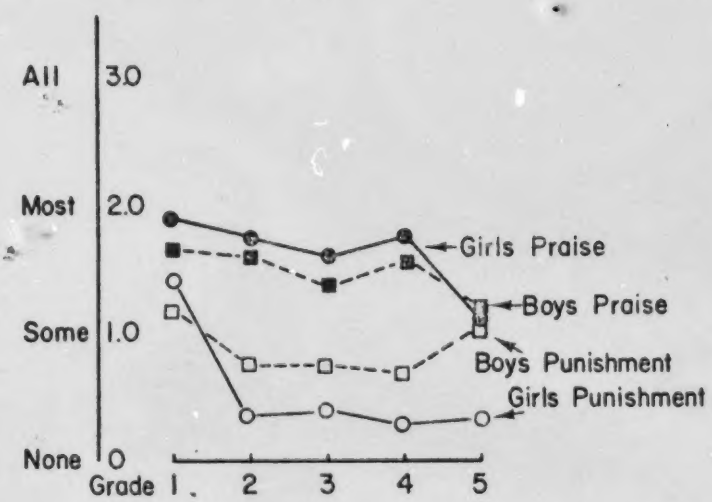


Mean Response by Girls and Boys to the Item "I Enjoy Being in This Class"

Figure 5 shows the distributions of the items "My teacher praises me" and "My teacher punishes me" across the same sample of children. It is known that boys typically receive the bulk of teacher disapproval and punishment, especially for social behaviors, and that approval, especially academic approval, tends to be given most often to girls. As you see, responses on the TADS are consistent with previous findings. We were interested to see that, for girls, both personal praise and personal punishment decline significantly across age.

Having established expected differences of this sort between sexes and age levels, we then sought to establish whether the TADS would discriminate between children with behavior problems and those without. The previous spring, as part of another project, we had asked each of 15 grade school teachers to identify for us five children in their class whom they could call "hyperactive" and who displayed classroom learning and behavior problems. The next fall we administered the TADS to all the children and found these differences (Figure 6) between teacher-identified hyperactive boys and their normoactive male controls. The children were in the next grade by that time, in different classrooms with different teachers than those who first identified them as hyperactive, but as you see, eight out of a possible eleven <u>personal</u> items discriminate significantly between the two groups, while only one of the <u>general</u> classroom items does so. This leads us to believe that the TADS is sensitive to differences between children, that children with behavior

FIGURE 5



Mean Response by Girls and Boys to the Items:
"My Teacher Praises Me." and
"My Teacher Punishes Me."

FIGURE 6

TADS Items Which Differentiate Between Teacher-Identified Hyperactive Boys (N = 39) and Their Normoactive Classmates (N = 91)

Item	Class		HA	CON	F
The teacher likes the work I do	AA	I	1.35	1.86	8.21"
The teacher likes the way I work	ASa	I	1.41	1.86	5.98'
The teacher likes the way I act	AS	I	1.28	1.93	12.86'"
My teacher praises me	Pr	I	1.20	1.60	4.37'
The teacher doesn't like the work I do	DA	I	1.55	1.07	6.89"
The teacher doesn't like the way I act	DS	I	1.46	0.93	8.29"
My teacher punishes me	Pn	I	1.28	0.69	12.01'"
In my classroom I am unhappy	Un	I	1.68	0.94	12.61'"
My teacher praises students	Pr	C	1.31	1.80	5.82'

' p less than .05
" p less than .01
"' p less than .001

problems react personally to the classroom environment, and that this reaction carries over from year to year.

We have administered the TADS as a pre- and post-intervention measure in several school settings, with different groups of children, both at the elementary and secondary level. We have used it with behavior-disordered adolescents who were day-patients at our Child Psychiatry Service, and we are using it in a follow-up study of medically-diagnosed hyperkinetic children. We have demonstrated that, just as the TADS is sensitive to differences between children, it is also responsive to differences between teachers and to changes in teacher behavior produced by in-service training in behavioral principles.

Of course, we are still in the early stages with this instrument; for instance, we are currently using factor analytic techniques to further refine it. Depending on these developments, practical applications of the scale could include its ultimate use in program evaluation, teacher education, and school attitude research.

At this stage, we know that with our overall in-service training program we can demonstrate changes in teacher behavior, and that the behavior of students <u>does</u> change. So we don't need the TADS to help get us from teacher behavior to child impact in Figure 1. We now feel, however, that the TADS does help answer several even more crucial questions: e.g., "How do we know that what the classroom observer sees, i.e. more teacher approval, less teacher disapproval, more

student on-task behavior, etc., is also occurring when the observer is not in the room?" The problem of bias being introduced by an outsider watching and recording is certainly a real one in research of this type. It would seem logical that if you get changes in a measure like the TADS, then what an observer records in the way of change in teacher behavior is probably happening at other, nonobserved times as well. In effect, the TADS offers a second kind of classroom observation, by using the students as observers.

Also, the TADS allows you, after having modified teacher and student behavior, to see if you have done so in a way that the children liked, to see whether they had a positive attitude toward the change. We hope that, unlike many school attitude measures, the TADS will ultimately allow us to make very explicit suggestions to teachers about their impact--about what in their teaching behavior is and what isn't "coming across" to the children.

Behavior modification, especially classroom behavior modification, is being carefully scrutinized these days for its ethical ramifications. Critics have attacked the technique as repressive and as producing over-conformity. The growing humanism behind such criticisms has served to prevent grim preoccupation with academic performance and behavioral control by insisting that attention be paid to the child's response to his or her educational environment and experiences. There comes from this a rather compelling notion, then, that we <u>should</u> be asking children how they

respond to an intervention or a technique, and not just watching them work, meanwhile presuming that they like or don't like what's going on since we as researchers, educators or critics know best what's good for classrooms. Thus, instruments like the TADS may have usefulness in and of themselves as an extention of the current trend toward consumerism. After all, it is children who are the ultimate consumers of the product our educational system offers, and perhaps they are also the best available source of help as we evaluate our efforts to improve that product.

Hyperkinesis in the Classroom: If Cerebral Stimulants are the Last Resort, What Would be a First Resort?*

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* This paper is a modification and extension of the presentation "Classroom observation: A behavioral approach to the hyperactive child" made at APA, 1974. The research described is supported by NIMH grant MH-22659 to Dr. Loney.

Hyperkinesis in the Classroom: If Cerebral Stimulants Are the Last Resort, What Would Be a First Resort?

Since at least 2% of all school-age children are being administered Ritalin or Dexedrine as a treatment for the Hyperkinetic Syndrome (Sprague & Sleator, 1973), a large body of research has focused on the efficacy of these drugs as the primary treatment. The results are controversial, but many feel that cerebral stimulants should be prescribed only as a last resort. One of the concerns with these drugs as a treatment modality for hyperkinetic children is the frequency of such side effects as anorexia, insomnia, stomach-ache, dizziness, etc. (Grinspoon & Singer, 1973), which the children are rarely asked about (Loney & Ordoña, 1974). Another concern is the over-simplified view of diagnosis and treatment that drug use can perpetuate (Feighner & Feighner, 1974), and the fact that with this "keep it simple" attitude no individual or group of individuals has responsibility for outcome (Mira & Reece, 1974). There is also the possibility that the use of stimulants during childhood may lead to growth suppression (Safer, Allen, & Barr, 1972) or drug abuse in later life (Topaz, 1971). In addition, it is particularly disconcerting to realize that no one really knows

about the long-term effects of these drugs (Sroufe & Stewart, 1973).

With these concerns constantly appearing in the literature, why are cerebral stimulants still being so frequently prescribed? The fact is that these drugs, when compared with placebos, can produce improvement in a number of the behavioral symptoms commonly associated with hyperkinesis (Weiss, Werry, Minde, Douglas, & Sykes, 1968; Knights & Hinton, 1969; Sleator & von Neumann, 1974; Sleator, von Neumann, & Sprague, 1974). Attention span, for example, seems to be increased by cerebral stimulants (Eisenberg & Conners, 1971), and measurements of seat activity are also especially sensitive to medication (Christensen, 1973; Christensen & Sprague, 1973). But, the real problem is that it is impossible to predict with any degree of certainty which children will have a favorable response to medication (Stableford, Butz, Hasazi, Leitenberg, & Peyser, 1974). Therefore, some children may be started and maintained on a drug program when they don't really need one. Recent evidence using periodic placebo trials indicates that within two years approximately 25% of the children who had an initially favorable response to medication are no longer helped by these drugs (Sleator, et al., 1974).

Since the use of cerebral stimulants as the sole or even primary long-term treatment for hyperkinesis does not

seem to be supported by evidence (Mira & Reece, 1974) and in fact was never advocated by the experts in the field, effective alternates or supplements to drug treatment are clearly needed. An important question is whether a psychological form of treatment might be a first resort that could equal or better the results of stimulant medication. To date, only a few studies (Christensen, 1973; Christensen & Sprague, 1973; Stableford, et al., 1974) have directly compared behavior modification with drug therapy. Unfortunately, this general lack of research makes it hard to draw anything but very tenuous conclusions.

Patterson, Jones, Whittier, and Wright (1965), Doubros and Daniels (1966), and others have reported successful use of behavior therapy to improve classroom behavior of individual hyperkinetic children. Poor attending behavior, one of the primary symptoms of hyperkinesis, has been shown to be amenable to modification by the manipulation of consequences in the environment (Allen, Henke, Harris, Baer, & Reynolds, 1967; Hall, Panyan, Rabon, & Broden, 1968; Madsen, Becker, & Thomas, 1968). As Christensen (1973) says:

> The practical implications. . .are self-evident. They suggest that environmental treatment programs can be more effective than medication in managing the behavior

> of children characterized as displaying hyperactivity, hyperkinesis, minimal brain dysfunction, etc. (p. 30)

However, the usefulness of behavior modification techniques in out-patient clinics remains unsubstantiated (O'Leary & Kent, 1974). Since most behavioral research has been done with highly selected populations in artificial settings, there is a need for more systematic evaluation of social learning procedures before they can be recommended for routine use in clinical settings (Patterson, 1974).

The present article describes one part (classroom behavioral management) of a project designed to compare the progress of hyperkinetic children treated by means of cerebral stimulants with those managed through behavioral counseling of parents and teachers. The goal was to increase the appropriate behavior of medically diagnosed hyperkinetic children in the regular classroom. The treatment was done by a teacher consultant using what Caplan (1964) calls consultee-centered case consultation.

> The major focus is to improve the professional functioning of the teacher. Changes in particular children are of secondary concern; however, it is assumed that alleviating teacher difficulties

> (i.e., lack of understanding, lack of skill, lack of self-confidence, or lack of objectivity) will result in improved behavior of the referred child. (Meyers, 1973, p. 6)

The objectives of the intervention were (a) to rely on social reinforcers (approval and disapproval) rather than extrinsic or material ones (candy, prizes, money, etc.); and (b) to avoid techniques which require the teacher to record behavior, which rely on electrical devices, which remove the child from the regular classroom, or which subject him to uncontrolled peer pressures. The authors wanted to know if such an approach could be an effective first resort treatment for the hyperkinetic child.

Method

Subjects

All potential Ss were male outpatients seen by the Child Psychiatry Service of the University of Iowa College of Medicine from October 1973 to May 1974. They ranged from 6 to 12 years in age. Each had average intelligence and attended a different school. To become Ss the boys had to be diagnosed as having the Hyperkinetic Reaction of Childhood by the Chief Psychiatrist, a man who has had extensive research and clinical experience with this type of child.

His diagnosis was based primarily on parental report of a long history of hyperactivity, e.g., high activity level, impulsivity, short attention span, etc. (Stewart, Pitts, Craig, & Dieruf, 1966). The Hyperkinesis Index of the Conners' Teacher's Questionnaire (Conners & Page, 1972), shown in Table 1, was used to verify the diagnoses.

Insert Table 1 about here

Sprague, Cohen, and Werry (1973), using a slightly different form of the Conners' scale, state that a score over 14 on the Hyperkinesis Index is indicative of the Hyperkinetic Syndrome. A child with a score above this level is considered to be a potential candidate for cerebral stimulants (Sleator & von Neumann, 1974). In the present sample, the mean value of the Hyperkinetic Index for all cases was 20.6.

Only three of the first six cases will be discussed here. One was not included because his treatment was part of a feasibility investigation for the intervention technique.[1] The second was excluded because his treatment would not add any new or revealing data to the present discussion, although he increased his percent of time on-task from 58% to 70%. The third was not included because his teacher felt, and the pre-intervention (baseline) observation confirmed, that the boy was adjusting adequately at school.

The mean score on the Conners' Hyperkinesis Index was 22.0 for the three Ss reported, and 16.6 for the excluded cases.

Procedure

Design. A pre-test (classroom observation), intervention, post-test (classroom observation) model was used for the study. Before the initial classroom observation the teacher was asked a series of questions about the S and his classmates. On the basis of this interview three boys were chosen to be observed along with the hyperkinetic target child. These three additional target boys were: (1) Cohort, "a boy who is on the go, excitable, inattentive, into everything, can't keep his mind on one thing"; (2) Average, "a boy who is typical or average in terms of activity level, achievement, intelligence, and peer acceptance"; and (3) Model, "a boy who is bright, cooperative, and well liked by all". Since several children who most closely fit each of these descriptions were nominated, the teachers did not know which specific children were chosen to be observed.

Observation Techniques. All observations were done in the S's classroom, on a Friday, by graduate students who were blind to the details of the study. The observers, as well as the general class activities, were the same for both the pre- and post-intervention observations.

The observation system was adapted from Madsen and Madsen (1974), and an abbreviated version of the observation form appears in Table 2. Each form is 8 lines long, has 32 intervals, and takes approximately fifteen minutes to complete. In every S's class a minimum of five observation

Insert Table 2 about here

forms was obtained for both the pre- and post-intervention observations. This yielded at least 40 intervals for each of the four children, and 160 for the teacher. For the purposes of this paper, all data have been prorated to these levels.

The observation sequence used by the observers was as follows: observe Child 1 (5 seconds), observe Teacher (5 seconds), record both teacher and child behavior (10 seconds); observe Child 2 (5 seconds), observe Teacher (5 seconds), record (10 seconds); etc. All observers were equipped with a pocket cassette recorder, earphone (with Y-adapter for reliability checks), and a programmed tape to guide them through the observation form.

On the observation forms, children's behaviors are divided into On-task or appropriate, and Off-task or inappropriate. The four symbols at the top of each observation box are for scoring these behaviors. The + is for on-task

behavior. It is defined as behavior appropriate to the learning situation and classroom rules. The three remaining codes are for different types of off-task behavior. The N is for noise, e.g., talking out or pencil tapping; the M is for motor movement, e.g., out of seat or squirming; and the O is for passive off-task behavior, e.g., daydreaming or staring.

The other eight codes in the observation boxes are for teacher behaviors. The four in capital letters are for appropriate use of: academic approval (AA), e.g., "That answer is correct, Charlie"; social approval (AS), e.g., "You're being such good listeners"; academic disapproval (DA), e.g., "That answer is wrong"; and social disapproval (DS), e.g., "Ellen, be quiet." The four coded with small letters are for inappropriate use of each of the above; e.g., aa is for academic approval error (saying, "That answer is correct, Charlie" when it is actually incorrect).[2] If none of these teacher behaviors occur in a given interval, the interval is left blank. For the teachers of the three Ss to be discussed, the mean percent of blank intervals was 77.80. This is typical for teachers observed by the investigators.

The authors have conducted reliability tests (total number of coded intervals agree/total number of coded intervals

agree + total number of coded intervals disagree) with the observation system. Average reliability figures of 90.1% for child behavior and 74.2% for teacher behavior were obtained.

Intervention. The consultant had no individual contact with the Ss. Since it was the teachers who implemented the treatment plan, insuring their cooperation was crucial. The teachers were not volunteers, as is the case in many studies, and they were not rewarded with money or given course credit for participation. However, the teachers were offered both objective, non-threatening feedback about their teaching style and a way to manage their class more successfully. Both of these proved to be powerful reinforcers.

In the initial consultation following the pre-intervention observation, the results of that observation were presented and explained to each teacher. The teachers had the opportunity to compare the way they wanted to act (intentions) with the way they were acting (observed behaviors). During this first consultation the teachers were not given any concrete suggestions, except to practice being more positive and to ignore as many minor disruptions as possible. This was done mainly to allow them to think about the implications of the first meeting, and to give them an opportunity to implement new strategies on their own.

The subsequent consultations involved encouraging any positive changes in the teacher's behavior and discussing classroom management. The general tone and flavor of these meetings was much like that described by Madsen, Madsen, Saudargas, Hammond, Smith, and Edgar (1970). The techniques taught consisted of, but were not limited to, elements of praise and ignoring, rules, and class structure. Of these techniques, the major emphasis was on praise for appropriate behavior.

The first goal of treatment was to make teachers aware that hyperkinetic children do do good things, and that when they do, good things ought to happen to them, i.e., the teacher should praise the child's appropriate behavior. They were told that with a lack of approval for appropriate behavior, disapproval can serve as a positive reinforcer, and children may actually work to get it. The teachers were also warned that when one changes an environmental contingency, behavior may get worse before it gets better. In addition to giving praise for appropriate behavior, the teachers were asked to limit the number of disapprovals (reprimands) directed toward the hyperkinetic child and the class as a whole, i.e., to ignore some of the minor squirming, talking, etc. and use disapprovals only for major violations of the rules. They were told that

ignoring would be ineffective unless there was also approval for incompatible (appropriate) behavior.

Two other techniques were implemented in all the classes. First, the teachers were urged to use soft reprimands (O'Leary, Kaufman, Kass, & Drabman, 1970); second, they were helped to establish clear rules and guidelines within their classes, e.g., "Quiet talking is permitted", "Raise your hand if you want my attention", etc.

Beyond this, the consultative sessions became very individualized. For example, Broden, Hall, and Mitts (1971) report that self-recording by students is effective for increasing attending behavior and decreasing talk-outs. One of the teachers tried this technique and found it to be a useful adjunct to the things she was doing. Also, part of the consultant's time was spent discussing other apparently unrelated topics. Teachers have expressed the idea that "It's nice to have somebody come around and show an interest", and it may be that these positive feelings enhance their willingness to change their behavior.

Most of the consultation sessions took place after school and lasted about an hour. The duration of the total intervention period for each case ranged from eight to twelve weeks. The number of consultations was flexible, with a minimum of three and a maximum of six visits.

Results and Discussion

Case I. This hyperkinetic child was in a 4th grade classroom, with 29 other students, in a rural Iowa community. The school was very traditional, and there were not many special or extra services available. The specific results of this case can be seen in Figure 1.

Insert Figure 1 about here

Initially, the mean on-task level of the four target children was quite low. The hyperkinetic target child, even though he had the lowest on-task level in the class, doesn't appear to be very different from his classmates. However, in this case reporting child behavior only as the percent of time on-task is misleading. Even though the children's levels of off-task behavior were approximately equal, there were distinct differences in the types of off-task behavior they displayed. The hyperkinetic child was fidgety, out of his seat, and noisy, while the other target children were engaging in passive off-task behaviors, e.g., daydreaming, staring, etc. Passive off-task behaviors are not very productive; but at least they are not disruptive, and they don't usually attract a teacher's attention or cause a referral to be initiated.

The initial teacher behavior shown here is typical. Academic approval and social disapproval are occurring frequently, while academic disapproval and social approval are very infrequent. In situations like this, the focus of the intervention is on increasing the number of social approvals and decreasing the number of social disapprovals, as the teacher is already doing a good job of providing the children with academic feedback. Across time (pre- to post-intervention), teacher behavior changed in the expected direction; i.e., social approval increased and social disapproval decreased.

In most effective behavior modification projects not only does the teacher modify the children, the children modify the teacher. That was especially true in this classroom. When the teacher made a slight change in her behavior, the children responded by altering their behavior. The response of the children made it easier for the teacher to maintain her new behaviors and facilitated other positive responses on her part. This could be called a benign rather than a vicious circle.

With the change in teacher behavior, there was also a substantial change in the behavior of the hyperkinetic target child. He increased his percent of his time on-task by 30%, a 60% improvement over his pre-intervention (base-

line) observation score. The other children being observed exhibited similar improvement, thereby leaving their positions in the class unchanged. Although the behavior of the hyperkinetic child improved substantially, in some senses he may still be at the same relative disadvantage.

This finding is not unique. Other research (Drabman & Lahey, 1974) has found behavioral changes in a target child's classmates even though the classmates weren't being treated. In the present investigation the intervention was not directed solely at the target child, so one should expect the behavior of others in the class to change. By observing a number of children in each class, it is possible to assess these carry-over effects and to compare behavioral patterns of different children within that classroom, i.e., there are in-class norms for a target child's behavior. Since all classrooms are different, information of this type could also be valuable in tailoring an individual intervention program for a child in a particular classroom.

Case II. This hyperkinetic boy (Tom) lives on a farm near a small Iowa town. He was in a 5th grade class of sixteen children, and the results of his treatment are

Insert Figure 2 about here

shown in Figure 2. Tom's teacher had organized her class so

that the mornings were essentially individual study time, while the afternoons consisted of group lessons, group activities, and class discussions. While Tom was a little less disruptive in the morning than in the afternoon, the teacher's approval ratio (Approval/Approval + Disapproval) to him didn't respond to this difference. She gave him no more approval in the morning than in the afternoon. However, the classes' total on-task level was substantially higher than Tom's, and the teacher's approval ratio to the class reflected this discrepancy.

The consultant and teacher focused on the difficulties Tom was having during study time; and as a result the teacher drastically changed the way she related to Tom during this time. Her approval ratio increased from 9% on the pre-intervention observation to 100% on the post-intervention observation. She accomplished most of this change by reducing, from 10 to 0, the number of disapprovals that she directed toward Tom. Tom responded by increasing his on-task level during study time from 62% to 96%. During the afternoon the teacher's approval ratio to Tom remained low and his behavior stayed at about the pre-intervention level.

On the basis of available evidence (Wahler, 1969; Woolfolk & Woolfolk, 1974), one would probably not expect the target child's new behavior during the morning study time to

generalize to the group activities in the afternoon. However, it would be logical to assume that the teacher, upon seeing the child's improved behavior during the morning, might change her behavior in the afternoon, especially since the principles taught during the intervention were such general ones. Since that was not the case, this approach must not be as "simple" or "generalizable" as it appears to be. To obtain positive results, careful follow-up and good feedback are still necessary.

This case was started late in the school year so there was not sufficient time after the post-intervention observation for encouraging the teacher to utilize her new behaviors in the afternoons as well as in the mornings and re-evaluating the outcome.

Case III. This hyperkinetic target child was in a 3rd grade class, with 20 students, in a medium-size Iowa city. Eighteen months earlier his teacher had been taught to use behavioral techniques. The pre-intervention observation

Insert Figure 3 about here

(shown in Figure 3) indicates that the teacher was still functioning very well, and that the class behavior was quite good. The teacher gave over twenty-five approvals and only a few disapprovals. For the four children observed, the

average time on-task was over 80%. However, the hyperkinetic child was clearly the most off-task, since even the cohort was on-task as much as the average and model children.

In this case the consultant decided against intervention because a variety of local support services was available. The hyperkinetic child's behavior was said to be steadily improving, and the teacher was already implementing many of the behavioral techniques that would normally be taught. Looking at the second observation, one would be forced to think that the consultant had made a poor decision. There were twenty-six academic approvals during the pre-intervention observation and only six during the second observation. There were seven social disapprovals during the pre-intervention observation and twenty-two during the second observation. Teacher behavior seems to have deteriorated dramatically. At the same time, the hyperkinetic child and the cohort increased their percent of time off-task.

What had actually happened was a naturally occurring reversal. At the time of the second observation the regular teacher had a student teacher who was doing the bulk of the teaching, and she was the one observed during the second observation. The student teacher was having difficulty managing the whole class. As she gave more social disapprovals the children were more off-task, and the conflict kept escalating.

Unfortunately, the second observation was made during the student teacher's last week in the classroom. With this time constraint, it was impossible for her to learn and then implement the behavioral strategies.

The change in teaching style from the regular to the student teacher appears to have had its most negative effects on the hyperkinetic child and the cohort. The cohort was functioning excellently during the pre-intervention observation, but his appropriate behavior decreased dramatically during the second observation. Similarly, the hyperkinetic child's behavior was more inappropriate during the second observation than during the pre-intervention observation. The average and model children, however, did not show a real decrease in appropriate behavior. It may be that such children are more adaptable to new situations and better able to cope with negative environmental changes than are "problem" children.

Discussion. The major strength of the described treatment program probably lies in the way it fits the needs of many classroom situations. In most classrooms, children are rarely praised for good behavior; this is especially true for the hyperkinetic child. Even teachers who realize that they aren't sufficiently approving of appropriate behavior find it hard to praise a hyperkinetic child because they

feel that it's impossible to "catch him being good." Instead, most teacher attention takes the form of reprimands and disapprovals, but this is not what teachers want to do. They want to be positive. Almost all teachers say they would like to be more approving than disapproving; but when actually observed, only a small group of them are truly more positive than negative. This is why a consultant's feedback about teaching style is so valuable to teachers. Teachers want to know how they behave in the classroom, but "Unless they have a rare principal, teachers seldom receive direct, useful feedback about teaching" (Good & Brophy, 1973, p. 34). Showing teachers the discrepancy between their intentions and their actions, if there is a discrepancy, is also an effective agent for behavioral change. Good and Brophy indicate that,

> Teachers are most likely to change their classroom performance when they are provided with information that shows a discrepancy between what they want to do and what they are doing (p. 34).

Unfortunately, many teachers don't understand that being positive is not only more satisfying and humanistic, it works. Giving approval for appropriate behavior is an effective way to reduce disruptive behavior (Becker, Madsen, Arnold, &

Thomas, 1967; Hall, Lund, & Jackson, 1968; etc.). Once teachers realize this fact, most of them choose to alter their behavior.

The changes reported in observed teacher behavior may only be a slight indication of the true magnitude of behavioral change since the categories of observable teacher behavior have such low base-rates. Only teachers' verbal behavior was scored routinely, and because of this other teacher behaviors (gestures, touches, expressions, etc.) were partially unrecorded. However, the observed changes in teacher behavior are associated with significant changes in child behavior, so it may be that the change in verbal behavior is by itself quite powerful; or, the change in verbal behavior may be an indication of similar changes in the other more subtle aspects of teacher behavior. Observer drift, observer bias, and observee reactivity are just a few of the related problems with using naturalistic observations as a technique for gathering data. For a complete discussion of these concerns, interested persons should read the excellent review by Johnson and Bolstad (1973).

The evidence seems compelling. Consultee-centered case consultation can be an easy, effective treatment for clinically diagnosed hyperkinetic boys. But should it be the first resort? There are a number of concerns with behavior modifi-

cation programs and, while they should not be taken lightly, none of these concerns seems to be as serious as the ones possibly associated with the long-term use of cerebral stimulants.

However, even if all of the difficulties with these two treatments for hyperkinesis are totally ignored, behavioral management still has at least two distinct advantages. Unlike medication, behavior modification often has a direct beneficial effect on the classmates of a referred child. Also, behavior modification can be used as a preventive measure. Before any "problem" child is labelled, referred, identified, or even noticed, a classroom teacher can be using behavioral techniques that will maximize each child's chance for success, and possibly prevent some problems from developing at all.

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Footnotes

[1]It is worth noting that this boy increased his percent of time on-task (46% to 71%) during the course of treatment.

[2]For a detailed discussion of all the codes and their definitions, see Chapter 9 in Madsen and Madsen (1974).

Table 1

The Hyperkinesis Index

Teacher Questionnaire

TEACHER'S OBSERVATIONS

Information obtained _____ ____ _____ **by** _____
Month **Day** **Year**

Child's Name _____

_____

DEGREE OF ACTIVITY

	0 Not At All	1 Just A Little	2 Pretty Much	3 Very Much
1. Restless in the "squirmy" sense.				
2. Demands must be met immediately.				
3. Distractibility or attention span a problem.				
4. Disturbs other children.				
5. Restless, always "up and on the go."				
6. Excitable, impulsive.				
7. Fails to finish things that he starts.				
8. Childish and immature.				
9. Easily frustrated in efforts.				
10. Difficulty in learning.				

Table 2

Teacher-Child Observation Form

(Abbreviated)

Observer _____ Teacher _____

Reliability Observer _____ Time: Start ___ End ___

Date ____ Grade ____ Page ___ of ___

ACTIVITY	LINE	CHILD 1	COM.	CHILD 2	COM.	CHILD 3	COM	CHILD 4	COM
	1	+ NMO AA AS do ds oo os DA DS		+ NMO AA AS do ds oo os DA DS		+ NMO AA AS do ds oo os DA DS		+ NMO AA AS do ds oo os DA DS	
	2								
	3								
	4								
	5								

Figure 1. The effects of treatment on the hyperkinetic child (Case I), his teacher, and three of his classmates ($\bar{X}$ = mean percent of time on-task for the four boys observed).

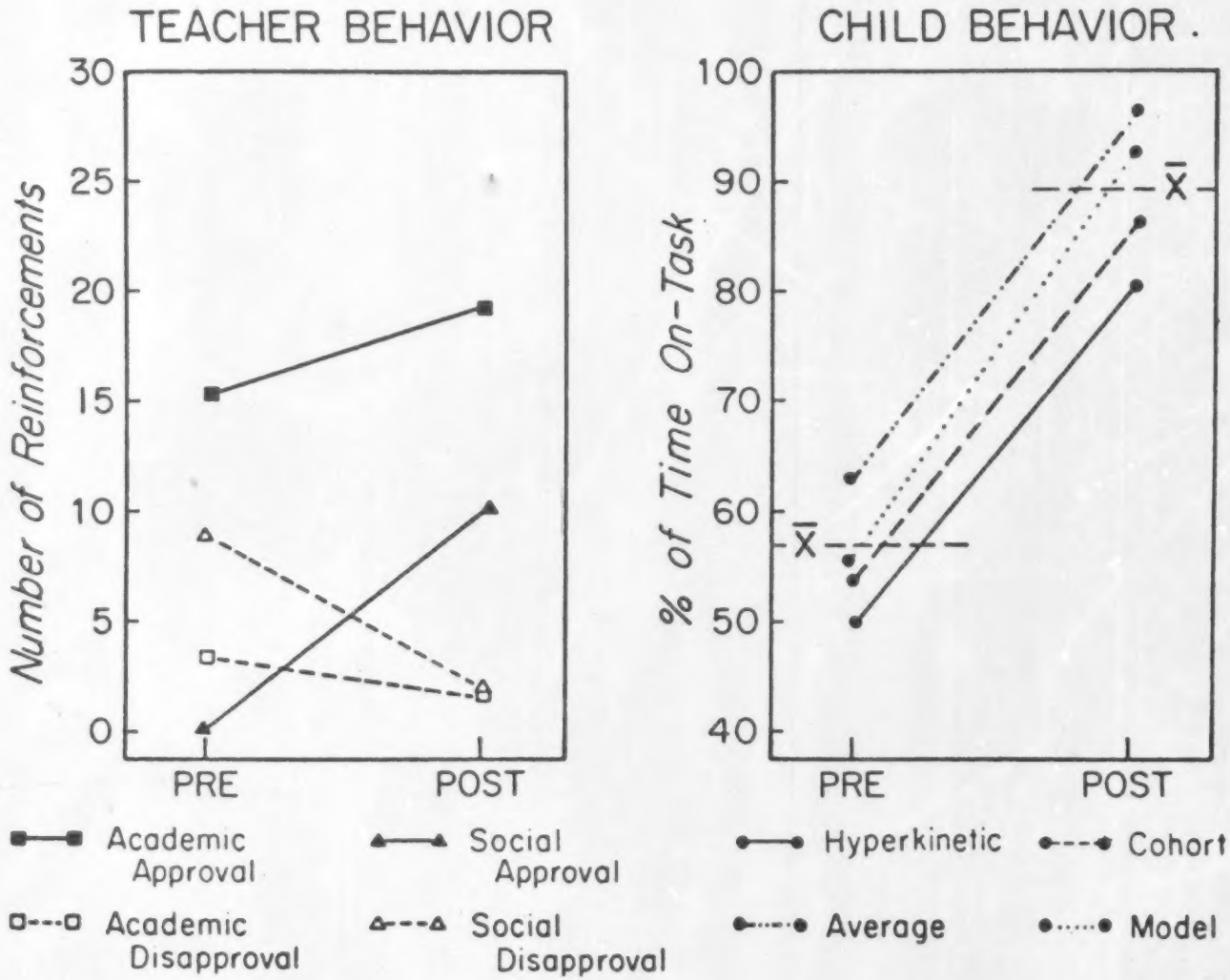

Figure 2. The effects of treatment on the hyperkinetic child (Case II), his teacher, and his classmates.

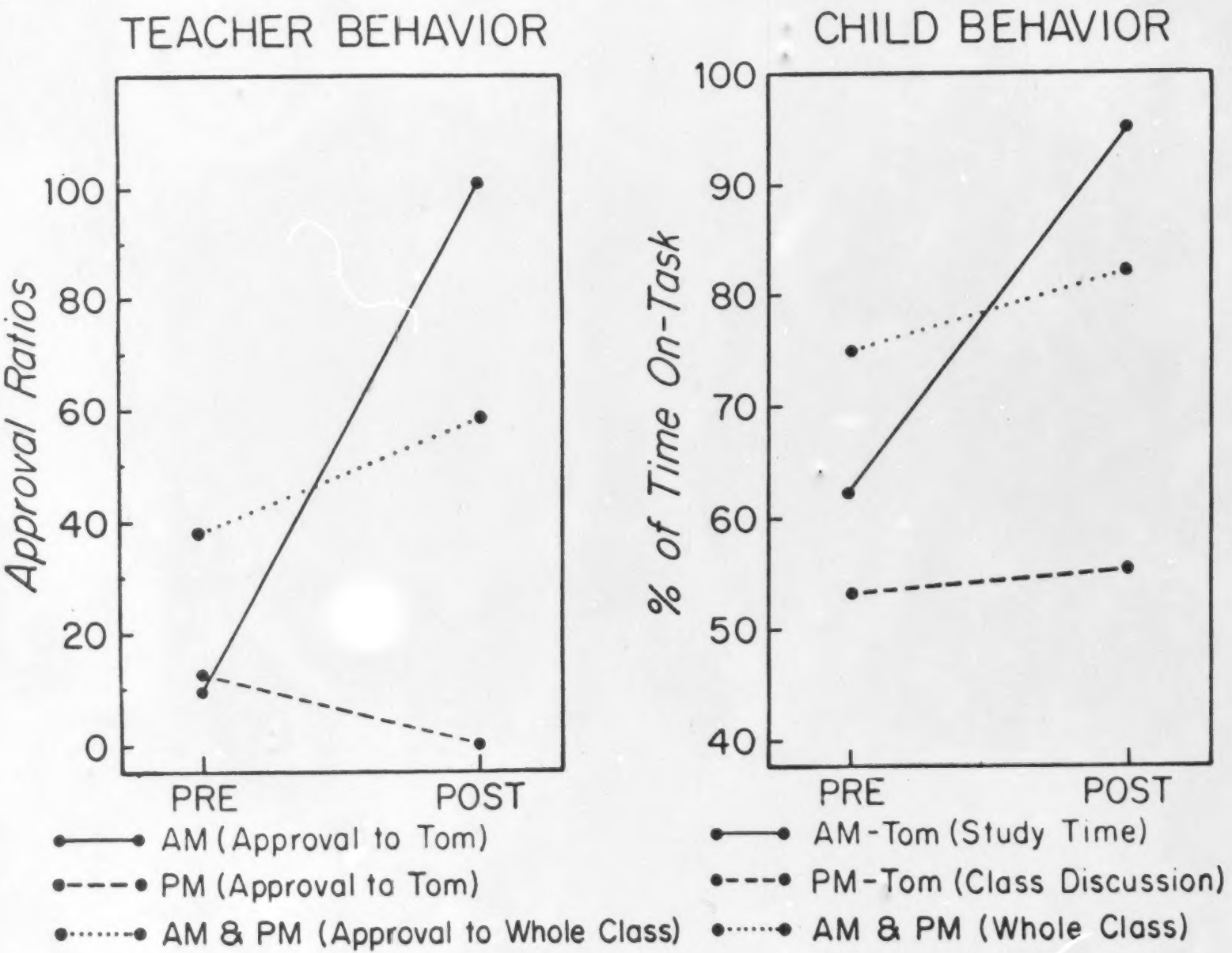

Figure 3. The effects of teacher behavior on the hyperkinetic child (Case III), and three of his classmates ($\bar{X}$ = mean percent of time on-task for the four boys observed).